



YEARLY STATUS REPORT - 2021-2022

Part A

Data of the Institution

1.Name of the Institution		SILICON INSTITUTE OF TECHNOLOGY
• Name of the Head of the institution		DR JAIDEEP TALUKDAR
• Designation		PRINCIPAL
• Does the institution function from its own campus?		Yes
• Phone No. of the Principal		
• Alternate phone No.		
• Mobile No. (Principal)		9051419777
• Registered e-mail ID (Principal)		jaideep@silicon.ac.in
• Address		
• City/Town		Bhubaneswar
• State/UT		ODISHA
• Pin Code		751024
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)		27/09/2018
• Type of Institution		Co-education
• Location		Urban

• Financial Status	Self-financing				
• Name of the IQAC Co-ordinator/Director	DR SIBA SANKAR NAYAK(COORDINATOR)				
• Phone No.					
• Mobile No:	9861930033				
• IQAC e-mail ID	iqac@silicon.ac.in				
3.Website address (Web link of the AQAR (Previous Academic Year)	https://silicon.ac.in/wp-content/uploads/2022/09/AQAR-2019-20.pdf				
4.Was the Academic Calendar prepared for that year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://silicon.ac.in/wp-content/uploads/2022/04/2021-22-Academic-Year.pdf				
5.Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.04	2014	10/10/2014	31/12/2023
6.Date of Establishment of IQAC			27/01/2012		
7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?					
Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount	
0	0	0	Nil	0	
8.Provide details regarding the composition of the IQAC:					
• Upload the latest notification regarding the composition of the IQAC by the HEI	View File				
9.No. of IQAC meetings held during the year			02		
• Were the minutes of IQAC meeting(s) and	Yes				

compliance to the decisions taken uploaded on the institutional website?	
<ul style="list-style-type: none"> If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded
10. Did IQAC receive funding from any funding agency to support its activities during the year?	No
<ul style="list-style-type: none"> If yes, mention the amount 	
11. Significant contributions made by IQAC during the current year (maximum five bullets)	
<p>Improvement in student participation in innovation and startups Financial support for Patent registration and Publication Introduction of additional classes in the time table Push for University status for the institute</p>	
12. Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:	
Plan of Action	Achievements/Outcomes
Remedial classes for weaker students	Overall improvement in Teaching-Learning process
13. Was the AQAR placed before the statutory body?	Yes
<ul style="list-style-type: none"> Name of the statutory body 	
Name of the statutory body	Date of meeting(s)
Executive Council	27/08/2022
14. Was the institutional data submitted to AISHE ?	Yes
<ul style="list-style-type: none"> Year 	

Year	Date of Submission
21-22	05/01/2023

15. Multidisciplinary / interdisciplinary

In order to develop the all-round capacities of the students -intellectual, aesthetic, social, physical, emotional and moral in an integrated manner, the college is preparing to include multidisciplinary subjects as per the National Educational Policy 2020. Keeping in view the problems faced by the students, the college is planning to set up regular and short term courses in multidisciplinary and interdisciplinary areas. The aim is to make the students equipped for a holistic approach in the present and emerging situation.

As the College is preparing itself to have more of multi-disciplinary subjects it tries to identify the programme learning outcomes along with courses and unit learning outcomes that define the specific knowledge, skills, attitudes and values that are to be acquired by the learner and would ensure that each programme achieves its goal. Special care is taken by the University and its academic bodies to start new departments and programmes.

16. Academic bank of credits (ABC):

Regarding the implementation of Academic Bank of Credits, the institution has to wait for the academic council to give a green signal. The pedagogical approach of the faculties' are constructivist, inquiry-based, reflective, collaborative and integrative. Summative and Formative assessments and assignments are used to evaluate the Students learning outcome. Mandatory internship along with the concept of Practice school has been introduced.

The Practice School course provides an opportunity for students to foster and acquire specific professional skills and valuable work experience by practically implementing the concepts in real-world situations.

The PS course is an optional component in the B.Tech. curriculum carrying 16 credits.

17. Skill development:

The vision of the college is promoting Value-Based Quality Education, hence the college takes efforts to inculcate positivity among the learners.

To improve student diversity through pan India selection process as

decided by the government

To improve skill orientation through curricular and co curricular activities

To encourage entrepreneurship by offering conducive entrepreneurial climate

In pursuance of the "Atmanirbhar Bharath" campaign and 'StartupIndia' mission of the Govt of India, efforts have been made for creating a conducive climate for nurturing entrepreneurial passion amongst the youngsters.

Silicon's incubation center is a place to build future entrepreneurs mainly from Silicon faculties and students and see them realize their dreams. The focus areas are:

Entrepreneurship Development

Building Industry-Student and Industry-Faculty Relationships

Building Industry Focused Technology Value Stream

Employment Generation

Enable Automation in the Local Market

Silicon has been approved as Business Incubator (BI) by MSME, Govt. of India under the scheme "Support for Entrepreneurial and Managerial Development of MSMEs through Incubator" during PMAC (Project Monitoring and Advisory Committee) meeting held on 20th Dec 2019 at New Delhi. The BI is entitled to get a funding up to 1 crore for machinery and equipment to develop incubation labs. Under this scheme 10 innovative proposals from students and entrepreneurs will also be funded every year. Each innovative idea will get a funding of 15 lakh to develop the product within one year. Apart from this, there is a provision of seed capital up to 1 crore for commercialization of a product for existing entrepreneurs.

18. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

No such course exists here but efforts are on to start a course on multi-disciplinary research for preserving, documenting, and building upon a philosophic and scientific understanding of Indian Traditional Knowledge Systems. They will also have rigorous theoretical knowledge ranging from astronomy and mathematics to metaphysics, grammar, logic, literature, and linguistics. The institute commemorates Mother tongue day, and Yoga Day as an act of reverence towards Indian languages and culture. The promotion of Indian languages, traditions is also facilitated through competitions organized during the annual cultural festival. Competitions such as essay writing, poetry, speech competition, folk song, folk dance and skit encourage students

to stay connected with their rich Indian culture and heritage.

19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

Outcome-Based Education (OBE) is a pedagogical model that entails the restructuring of curriculum, pedagogy and assessment practices to reflect the achievement of high-order learning, as opposed to a mere accumulation of course credits.

All the faculties of the college were trained in OBE. Based on the training, all courses were designed under OBE paradigm with Program Outcomes (PO), Program Specific Outcomes (PSO) and Course Outcomes (CO) specified. The integration of OBE in curriculum has been introduced in 2018. During the student induction program, the students are given an orientation on Outcome Based Education paradigm; and the Program Outcomes are explained to the students. The curriculum clearly states Program Outcomes (PO), Program Specific Outcomes (PSO) and Course Outcomes (CO) and teaching-learning pedagogy adapted at the institute. Every faculty explains the course outcomes of each course before the commencement of the same. The integration of OBE in Question Bank was introduced in 2018 and a notable initiative was the preparation of question bank based on Bloom's taxonomy. It enables the assessment of the students at cognitive levels namely remembering, understanding, applying, analyzing, evaluating and creating..

20.Distance education/online education:

Keeping in view the convenience of the student, the various technological tools used by the faculties especially during the pandemic lockdown are Google Classroom, Zoom, Google, using videos as teaching and learning aids, Group collaboration and interaction and assignment and revision as well as the assessments have been conducted are some of the institutional efforts towards blended learning.

As a part of the internship program many courses are provided through online platform. Online education provides ample flexibility to students to learn and explore as per their requirements at their pace. Many course materials developed by our own faculties and other learning resources are available on the Silicon Intranet for the students to study. Faculties are encouraged to do online courses on various online platforms like Swayam and NPTEL. For this the institute gives incentives and grading during annual appraisal. The students are entitled to go for 2 MOOC courses in their study. This is mandatory.

The college is an active Local Chapter of NPTEL courses.

Extended Profile

1.Programme

1.1 11

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 2311

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	View File

2.2 548

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 3352

Number of students who appeared for the examinations conducted by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File

3.Academic

3.1 11

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	View File
3.2	149
Number of full-time teachers during the year:	
File Description	Documents
Institutional Data in Prescribed Format	View File
3.3	157
Number of sanctioned posts for the year:	
4.Institution	
4.1	243
Number of seats earmarked for reserved categories as per GOI/State Government during the year:	
4.2	35
Total number of Classrooms and Seminar halls	
4.3	801
Total number of computers on campus for academic purposes	
4.4	1254
Total expenditure, excluding salary, during the year (INR in Lakhs):	
Part B	
CURRICULAR ASPECTS	
1.1 - Curriculum Design and Development	
1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.	
The institute has always been sensitive to respond positively in developing and implementing its curricula relevant to local, national, regional as well as global developmental needs, in the true spirit of its vision and mission. College revised the curriculum	

based on feedback from stakeholders and in consultation with the experts in the respective disciplines.

Through Student Projects, Field works, Internships and collaborative surveys, acquired knowledge is transferred to and refined from local needs. Promotion of entrepreneurship and knowledge regarding rules and regulations associated with local bodies .Language & Communication facilitate students to engage the society at regional and national levels.

Globally advancing subjects - Data Science, Python Programming, Machine Learning, Artificial Intelligence, Instrumental Methods of Analysis - increased competency level..Advanced learning encouraged through mandatory Interdisciplinary Open Courses, Internships, Value Added Courses and Online Courses through Swayam.. The stated Course Outcomes (COs) and Programme Specific Outcomes (PSOs) by considering relevance, advanced knowledge and specific learning outcomes, enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to the society. Learning objectives are directly and purposefully derived from intellectual, occupational, environmental, social and spiritual needs of current generation of students. Alignment of PO-PSO-CO framework depicts the level of attainment of knowledge acquisition and skill development in students.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	https://silicon.ac.in/programs/

1.1.2 - Number of Programmes where syllabus revision was carried out during the year

07

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	View File
Details of syllabus revision during the year	View File
Any additional information	No File Uploaded

1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year**64**

File Description	Documents
Curriculum / Syllabus of such courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	View File
MoUs with relevant organizations for these courses, if any	View File
Any additional information	No File Uploaded

1.2 - Academic Flexibility**1.2.1 - Number of new courses introduced across all programmes offered during the year****13**

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System**11**

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	View File
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	No File Uploaded

1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

Major part of the curriculum puts focus on Effective communication skills and leadership/participation in team Fulfillment of professional, social and ethical responsibilities; (i)environmental and energy issues and concerns; (j) Planning, developmeimplementation of strategies for life-long learning.. Emphasis has been on subjects like environmental study, Human ethics and Professional value study has been added as a mandatory course from 1st year..Yoga has been a mandatory courses for all students as a part of the syllabus. Poster Competitions, Debate Competition, etc.Women's Cell, Nature Club, Entrepreneurship and Development Club, Energy and Environment Club,Organic Farming Club are platforms to integrate cross-cutting issues.

Projects made mandatory for all students also focuses on cross-cutting issues irrelevant subjects. Value education, Language courses offered as well as vocational programmes and the activities conducted by college have emphasis on gender sensitisation, human values

The college has a Gender Policy, and Gender Audit is done to assess the gapthat needs to be addressed in gender issues.

Development of socially responsible and ethical behaviour have been stated in the Programme/CourseOutcomes of curriculum.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	View File
Any additional information	No File Uploaded

1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

02

File Description	Documents
List of value-added courses	View File
Brochure or any other document relating to value-added courses	View File
Any additional information	View File

1.3.3 - Number of students enrolled in the courses under 1.3.2 above

37

File Description	Documents
List of students enrolled	View File
Any additional information	No File Uploaded

1.3.4 - Number of students undertaking field work/projects/ internships / student projects

1572

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	No File Uploaded

1.4 - Feedback System

1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni

A. All 4 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	https://docs.google.com/document/d/1CyUW7eGPD7nWidrFUKfRUz4VbPgP7W5fqtI6grW9Fs/edit
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File
Any additional information	No File Uploaded

1.4.2 - The feedback system of the Institution comprises the following	A. Feedback collected, analysed and action taken made available on the website
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File Description	Documents
Provide URL for stakeholders' feedback report	https://docs.google.com/document/d/1CyuUW7eGPD7nWIdrFUKfRUz4VbPgP7W5fgtI6grW9Fs/edit
Any additional information	No File Uploaded

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment of Students

2.1.1.1 - Number of students admitted (year-wise) during the year

723

File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

79

File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

Remedial classes provide students with a comfortable learning environment. This gives an opportunity to closely analyze the students' shortcomings and guide them properly to be on the right track. We use different pedagogical methodologies that would work for students. Once, they realize that they can perform better, they

develop intrinsic motivation and start showing interest in learning.

We Appreciate the achievements of our students, even if they are small. It motivates them to perform better and improve their performance. It is the lack of motivation that takes away interest in learning among students.

Activities for Slow Learners

Here are some simple activities that we execute to improve the performance of slow learners and uplift their skills.

- Conduct group activities to boost interactive learning and confidence among the
- Come up with oral activities where students are encouraged to express their ideas.
- Rectify their mistakes and guide them properly to formulate their ideas into words.
- Curate exercises and homework with lower difficulty levels and gradually increase the difficulty level for the students to get acquainted with the topics at a slower pace.
- Advance learners are appreciated and are rewarded with the task of taking remedial classes.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
01/05/2022	2311	149

File Description	Documents
Upload any additional information	No File Uploaded

2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences:

Silicon practices a combination of traditional and modern methods of teaching and the faculty members are exposed and trained on these different methods and are adequately knowledgeable to choose the suitable method or methods for the topics to be taught in the class. The followings are a list of methods 1. Lecture: 2. Lecture with discussion: 3. Brain Storming: The faculty members allow the students to brainstorm over some topic or problems to reach or propose a solution. It has also created a healthy competition among the students to come up with better and innovative solutions for the problems. 4. Use of Technology in the classroom: practices. 5. Case Studies: 6. Role Playing: 7. Worksheets/Surveys: Students are asked to collect data on different aspects related to a specified situation by questionnaires and survey and to analyze the same for inferences. They are trained to handle data represent those through worksheets and charts. This allows them to learn the method of collecting data, processing and presenting the same. 8. Working Models/Live Specimens: 9. Guest Speakers: To break the monotony the departments invite guest speakers to deliver talks on important topics on frontier of technology. The students attend these programs enthusiastically. 10. Students Seminar: 11. Home Work / Assignment

File Description	Documents
Upload any additional information	No File Uploaded
Link for additional Information	https://silicon.ac.in/bbsr-home/mandatory-disclosure

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

All class room and seminar halls are fully equipped with modern ICT enabled tools. ICT enabled teaching learning methods are in implementation in the institution with more courses added every year. The faculty use ICT enabled classrooms with LCD projectors, Wi-Fi connectivity, software, PowerPoint presentations developed by teachers to expose the students to advanced knowledge and practical learning. The labs are updated with new software like Python, MATLAB, Microsoft Office, the latest Excel utility. In addition, they are cost-efficient and eliminate the usage of paper. Alongside minimizing cost, they also save time during class lectures enabling swift and dynamic transmission of content. They use conventional methods like lecturing, which is teacher centered and other methods which are interactive, collaborative and ICT enabled such as Microsoft Teams, Zoom, Google Classroom. The institution is also using IT enabled learning tools such as PPT, Video clippings, animations, video

demonstrations from online sources apart from providing reading materials and lab manuals through emails and other methods for effective teaching-learning process.. Printing facility is available in all the labs. The students and faculty make use of email, group mails, and social networking tools for instantaneous communication and information dissemination

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://silicon.ac.in/bbsr-home/mandatory-disclosure/
Upload any additional information	No File Uploaded

2.3.3 - Ratio of students to mentor for academic and other related issues

2.3.3.1 - Number of mentors

87

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	View File
Circulars with regard to assigning mentors to mentees	View File

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

Preparation and Adherence of Academic Calendar: The institution prepares the academic calendar every year in advance. The coverage of academic calendar covers the list of examination dates, workshops and industrial visits holidays, vacation dates, festivals, etc. Academic calendar provides the total effective working days available in a given semester. Then the director and senior colleagues prepare the time table by correlating the working days available and coverage of curriculum of the subjects. Thus the academic calendar monitors the effective delivery of the program with academic and business inputs. **Preparation and Adherence of Teaching Plan:** The concern faculties prepare teaching plan for their respective subjects of 40 to 48hours depending on the course content. These hours are distributed among class room teaching, question dicussion before the midterm and term -end examinations and similarly for lab session as per the subject requirements. These

plans are made in advance and serves as guide for conducting sessions. The director, Dean(Academics) and HODs check the progress of each course and ensures timely and effective completion of course in the specified time frame with perfect blend of practical and theoretical input.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

149

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	No File Uploaded

2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

72

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	View File
Any additional information	No File Uploaded

2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

1050

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	View File
Any additional information	No File Uploaded

2.5 - Evaluation Process and Reforms

2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

30

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	View File
Any additional information	No File Uploaded

2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

158

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	View File
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

Assessment is an integral part of system of education as it is instrumental in identifying and certifying the academic standards accomplished by a student and projecting them far and wide as an objective and impartial indicator of a student's performance. There will be continuous assessment of a student's performance throughout the semester and grades will be awarded based on assessment by the subject teacher and performance in different examinations. The assessment of performance will be done for Theory, Teachers

assessment etc. Question papers for Mid-Term and End-Term examinations (for both UG & PG programs) shall be prepared primarily electronically as per the process defined in the ERP system. All teachers who have preference for teaching the subject and/or having expertise in the subject shall contribute to the question bank for the subject created in the ERP system. There will be arrangements with appropriate restrictions made inside the Institute to evaluate the answer scripts electronically. However facilities may be provided to an examiner for electronic evaluation from home if required. The following cares are to be taken for the evaluation of answer scripts:

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/wp-content/uploads/2022/08/SIT-Examination-Manual-2022-23.pdf

2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

In strict compliance with the objectives of Outcome Based Education (OBE), the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are framed by the department offering the concerned program after rigorous consultation with all faculty and the stakeholders. After attainment of consensus, the same are widely propagated and publicized through various means such as display and/or communication specified hereunder. Website Curriculum /regulations books Class rooms Department Notice Boards Laboratories Student Induction Programs Meetings/ Interactions with employers Parent meet Faculty meetings Alumni meetings Professional Body meetings Library While addressing the students, the HODs create awareness on POs ,PSOs and COs. The faculty members, class teachers, mentors, course coordinators, program/ISO coordinators also inform the students and create awareness and emphasize the need to attain the outcomes

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	No File Uploaded
Link for additional Information	https://silicon.ac.in/wp-content/uploads/2023/04/UG-BTECH-CSE-2021.pdf

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

Course outcome assessment is a process of systematic collection and analysis of information that provides data to the extent to which the input teaching and learning resources have been utilized. The process culminates with adoption of remedial measure to improve student learning and meet the desired output. This information can be used for

- Improving teaching learning method;
- Improving the syllabus by fine tuning it;
- Introducing additional training programs and
- Redefining the CO for a course to align with the course contents and objective.

The basic principles governing assessment are:

- Assessment of student learning begins with educational objectives;
- Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes;
- Assessment fosters wider improvement when representatives from across the educational community are involved;
- Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change and

Various assessment tools / techniques can be used for measuring Course Outcomes.

- End-Semester Examination: Semester End Examination is a standard metric for assessing whether the outcomes are attained or not. Examination is more focused on attainment of Course outcomes and Program outcomes using a descriptive examination.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/bbsr-home/

2.6.3 - Pass Percentage of students

2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

597

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	No File Uploaded
Paste link for the annual report	https://silicon.ac.in/wp-content/uploads/2023/07/ANNUAL_REPORT_2021-22.pdf438

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

<https://silicon.ac.in/wp-content/uploads/2023/07/SSS-2021-22.pdf>

RESEARCH, INNOVATIONS AND EXTENSION

3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

Silicon Institute of Technology supports an expanding research enterprise committed to producing new knowledge, strengthening existing scholarship and discovering solutions with the potential to benefit society.

Silicon researchers collaborate with academics, industry experts and scientists from across the globe to promote advances in science and technology. State-of-the-art infrastructure, interdisciplinary research groups, and partnerships create a vibrant research ecosystem.

Few of the ongoing research at Silicon campuses include developing fiber optics sensors for civil applications, modernizing the electric grid to a Smart grid with bidirectional communication, computer vision, and developing CMOS integrated circuits and electronic system design.

The in-house Silicon Research Promotion Scheme promotes excellence in higher education and research by funding research projects for up to one year undertaken by faculty members in various disciplines.

Facilities created or provided are given below.

- Air-conditioned offices and high speed internet connections
- Financial assistance for patenting
- Incentives for journal publications
- Access to e- journals and e-books
- Air-conditioned digital library with high speed LAN and Wi-Fi connections
- Institute sponsored IEEE membership
- Free access to ScienceDirect and Scopus Indexed Journals
- Free access to Wiley, Springer, and Proquest e-text books
- Licensed Software like MATLAB, COMSOL, TCAD

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	No File Uploaded
Provide URL of policy document on promotion of research uploaded on the website	https://silicon.ac.in/bbsr-home/research-at-silicon/
Any additional information	No File Uploaded

3.1.2 - The institution provides seed money to its teachers for research

3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

2 lakhs

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	View File
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	No File Uploaded
List of teachers receiving grant and details of grant received	View File
Any additional information	No File Uploaded

3.1.3 - Number of teachers who were awarded national / international fellowship(s) for

advanced studies/research during the year**01**

File Description	Documents
e-copies of the award letters of the teachers	View File
List of teachers and details of their international fellowship(s)	View File
Any additional information	No File Uploaded

3.2 - Resource Mobilization for Research**3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)****20,55,000**

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	No File Uploaded

3.2.2 - Number of teachers having research projects during the year**05**

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	Nil
List of research projects during the year	View File

3.2.3 - Number of teachers recognised as research guides**11**

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	View File
Institutional data in Prescribed format	View File

3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year

0

File Description	Documents
Supporting document from Funding Agencies	No File Uploaded
Paste link to funding agencies' website	Nil
Any additional information	No File Uploaded

3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

SiliconTech established the Institution Innovation Council (IIC) on 21 November 2018 as per the norms of the Innovation Cell, Ministry of Human Resource Development (MHRD), Government of India.

The MHRD established MHRD's Innovation Cell (MIC) to systematically foster the culture of innovation amongst all higher education institutions (HEIs) in India. The primary mandate of MIC is to encourage, inspire and nurture young students to think of new ideas, concepts, and develop working prototypes.

Successful collaborations with academia, industry and governmental organizations are fundamental to SiliconTech's research enterprise. Active partnerships with researchers from multidisciplinary backgrounds aid critical research in new directions and deepen existing scholarship to advance knowledge and innovations in science and technology.

Collaborations provide access to resources, expertise, and global networks that increase funding opportunities and support strategic and capacity-building efforts of the research community at

SiliconTech. Students get a chance to work with experts and advance their scientific careers. SiliconTech's four research labs bring together scientists from premier research institutes in the country and industry partners from across the globe to work with faculty, students and young researchers at the institute to undertake important research areas.

Advanced VLSI Lab, IoT and Embedded Systems Lab, Data Science Lab, Advanced Materials Lab

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/research-at-silicon/

3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

15

File Description	Documents
Report of the events	View File
List of workshops/seminars conducted during the year	View File
Any additional information	No File Uploaded

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software

A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	No File Uploaded

3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

02

File Description	Documents
URL to the research page on HEI website	https://silicon.ac.in/bbsr-home/research-at-silicon/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	No File Uploaded

3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

54

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	No File Uploaded

3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

27

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

3.4.5.1 - Total number of Citations in Scopus during the year

17

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	No File Uploaded

3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University

3.4.6.1 - h-index of Scopus during the year

0

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	No File Uploaded
Any additional information	No File Uploaded

3.5 - Consultancy

3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)

10,21,643

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View File
List of consultants and revenue generated by them	View File
Any additional information	View File

3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

0

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	No File Uploaded
List of training programmes, teachers and staff trained for undertaking consultancy	No File Uploaded
List of facilities and staff available for undertaking consultancy	No File Uploaded
Any additional information	No File Uploaded

3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Sangam 2021 SiliconTech organized a one-day music fest on 11th December 2021 to celebrate the cultural diversity of our nation under the 'Ek Bharat Shrestha Bharat (EBSB)' program, an MHRD initiative of Government of India. Cultural programs including songs and dances were presented by participants from different schools and colleges as well as groups from different social and cultural organizations.

Kala Kumbh SiliconTech celebrated 'Kala Kumbh', an artists' workshop from 11th to 17th December 2021, under the banner of 'Azadi Ka Amrit Mahotsav', in partnership with NGMA (National Gallery of Modern

Art), Ministry of Culture, Government of India. It has been the host to one of the canvas scrolls which depicts the unsung heroes of Odisha who played an integral part in the fight for independence. A team of 70 professional artists from different parts of Odisha painted the canvas, which features images of various freedom fighters from Odisha. There were a few other subsidiary scrolls also that displayed 'Gond' art.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

0

File Description	Documents
Number of awards for extension activities in during the year	No File Uploaded
e-copy of the award letters	No File Uploaded
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

04

File Description	Documents
Reports of the events organized	View File
Any additional information	No File Uploaded

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

298

File Description	Documents
Reports of the events	View File
Any additional information	View File

3.7 - Collaboration

3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

01

File Description	Documents
Copies of documents highlighting collaboration	No File Uploaded
Any additional information	View File

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

05

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	View File
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	View File
Any additional information	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning, viz., classrooms, laboratories, computing equipments, etc.

The college has the required infrastructure and learning resources like classrooms, laboratory, and computer lab, library with reading room, lecturehall, training halls and auditorium. The campus is Wi-Fi enabled with 24/7. internet facilities to the students and staff. The College also updates the infrastructure and learning resources facilities with the changing requirementsThe College has ICT

Classrooms where the provision of Multimedia learning, Wi-Fi connectivity and internet access is given. The College has well equipped laboratories, each of them have state of the art laboratory instruments and facilities. These labs are also utilized for students to do their practical and projects.

Specialized Facilities and equipment available for teaching, learning and research: To promote teaching and learning College has facilities like LCD projectors and also audio visual equipment through which the remote workshops can be conducted. The college is having a digital library with internet which is being effectively used by the students for their research activity. There are some modern labs available like Makers Space, IOT Lab to help the students to do their projects. A modern VLSI Lab has come up in line with the recent developments in that field.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/research-labs/

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

The College is proactive in providing facilities for students to participate in cultural activities, sports and games in various ways. Sports & Cultural committee supported by a team of faculty members and full time sports officer look after all cultural, sports and extracurricular activities of the college. Gymnasium: College has well equipped gymnasium for boys & girls with all modern equipment Outdoor Games: A spacious play ground is available for outdoor games like Cricket, Football, Volleyball, Basketball, Badminton, etc with floodlights. Indoor Games: Facilities for the indoor games like Badminton, Table Tennis, Chess, Carrom, etc. are provided to students in the college campus. A large number of sports activities are organized in the college aiding the students to display their talent in sports activities. The College is having a modern, well equipped auditorium for organising conferences and seminars and various cultural programs. Every year college organizes an Annual Function and Annual Cultural Function, where students participate in many cultural activities. Zygon and Noiesis are two important annual events along with other events organised by the various committees like the Music Club, Meta academics Club etc.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/student-activities/

4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

30

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

496.92

File Description	Documents
Upload audited utilization statements	View File
Details of Expenditure, excluding salary, during the years	View File
Any additional information	No File Uploaded

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

A library management system is used to maintain library records. It tracks the records of the number of books in the library, how many books are issued, or how many books have been returned or renewed or late fine charges, etc. We can find books in an instant, issue/reissue books quickly, and manage all the data efficiently and orderly using this system. The purpose of a library management system is to provide instant and accurate data regarding any type of book,

therebysaving a lot of time and effort Completely automated librarymanagement systems make it possible to refer to books at anytime of the day to night, as well as make reservations online. Multiple copies ensure that resources are easily available forreference in the library The Library also has a separate Internetsection consisting of a number of networked terminals forproviding recent and most comprehensive access to e-journals andother e-reference resources to the faculty, students and staffunder Intranet and Internet environment. The Central library hasautomated all its routine activities through library software.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/central-library/

4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources

B. Any 3 of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	View File
Upload any additional information	No File Uploaded

4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

29,73,458

File Description	Documents
Audited statements of accounts	View File
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)**4.2.4.1 - Number of teachers and students using the library per day during the year**

4960

File Description	Documents
Upload details of library usage by teachers and students	View File
Any additional information	No File Uploaded

4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

- **Hardware:**
 - 8 High Capacity Servers in air-conditioned Central Server Room, 28 Terabyte Network Access Storage (NAS)
 - 11 Computer Labs with 418 Computers (1:1), ~800 Computers in Campus, 50+ Printers, 6 Scanners
- **Software:**
 - Windows 2003 Server, Windows 7/10, MS Office Suite, MS Security, Linux (Ubuntu, Fedora)
 - Cadence, MiPOWER, SCADA, PSCAD, LabView, English Lab+, Oracle 9i , MATLAB, PSIM, NETSIM
 - Mentor Graphics, PSPICE, PLC Programming, RSLogix, Twido Suite, IBM Rational Rose ...
- **Internet:**
 - 500 Mbps Internet Connectivity with redundancy & Cyberoam (Sofos) UTM Control
 - 4G Wi-Fi Installation in progress by Reliance JIO
 - Dedicated Internet Section in Central Library, Wi-Fi in Academic Areas
- **Power Backup:**
 - 176 kVA Uninterrupted Power Supply for Computers & other equipment
 - Backup with 4 silent DGs (160 kVA each) + 30 kW Roof-top Solar Power Plant
 - Smart classrooms with ICT facilities
 - Use of Software tools and e-resources
 - Legal Application S/W :45
 - Legal System S/W : 07
- One Remote Centre for online programs
- One studio for video recording

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
2312	701

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus A. 250 Mbps

File Description	Documents
Details of bandwidth available in the Institution	View File
Upload any additional information	No File Uploaded

4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing C. Any two of the above

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil
List of facilities for e-content development (Data Template)	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)**1026.09**

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	No File Uploaded

4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.

The infrastructure of an institution is the bedrock of all its activities. We take great pride in the infrastructure we have and strive to preserve it for the use of current and future stakeholders in a responsible and sustainable manner. Spread over a large area with ample seating capacity and providing plenty of naturally-lit space for readers, our library houses an impressive collection of books and journals. The library is fully automated and uses Integrated Library Management System. Digital access, bar coded inventory, online catalogue and an online reservation system ease student use and allow for access of e-resources from anywhere within the campus with some material being available for access from outside the campus as well. The library is effectively managed by the librarian and his staff. High end servers, with multi-processor systems, are available for college fraternity for research purposes. Entire college premises is Wi-Fi enabled and each and every student and staff member has access to the same. Each lab is managed by a team comprising of a teacher-in-charge, one technical assistant and a lab attendant. A Systems and Networks Administrator looks after the upkeep of the entire network. All classrooms are well furnished and ICT equipped for effective teaching and learning. The college has a team of gardeners to look after the upkeep of the college grounds

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/facilities/

STUDENT SUPPORT AND PROGRESSION**5.1 - Student Support**

5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

172

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	No File Uploaded

5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

0

File Description	Documents
Upload any additional information	No File Uploaded
Institutional data in prescribed format	No File Uploaded

5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology

A. All of the above

File Description	Documents
Link to Institutional website	https://silicon.ac.in/bbsr-home/
Details of capability development and schemes	View File
Any additional information	No File Uploaded

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

668

File Description	Documents
Any additional information	No File Uploaded
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	No File Uploaded
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

5.2 - Student Progression

5.2.1 - Number of outgoing students who got placement during the year

668

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	No File Uploaded

5.2.2 - Number of outgoing students progressing to higher education

10

File Description	Documents
Upload supporting data for students/alumni	No File Uploaded
Details of students who went for higher education	View File
Any additional information	No File Uploaded

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

22

File Description	Documents
Upload supporting data for students/alumni	View File
Any additional information	No File Uploaded

5.3 - Student Participation and Activities

5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

03

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	No File Uploaded

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

Silicon Student Council (SSC) is the student body representing students' interest and engagement in SiliconTech. Established in 2005, the SSC is actively involved in building student leadership, fostering community and belonging, and positioning SiliconTech as a leader in technical education.

The Student Council engages with their peers, faculty, and staff to facilitate meaningful participation of students in the various activities.

- Ensuring students' involvement in academic, professional, and personal development activities
- Liaise with the faculty, administration, and wider community to represent student interests
- Assist in the execution of academic and extracurricular activities in partnership with student clubs, different cells, and committees
- Resolving student concerns by harnessing the ideas and support of all students

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/student-council/

5.3.3 - Number of sports and cultural events / competitions organised by the institution

05

File Description	Documents
Report of the event	View File
List of sports and cultural events / competitions organised per year	View File
Upload any additional information	No File Uploaded

5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to the development of the institution through financial and other support services

The Silicon Alumni Association intends to create and foster an intimate bond between all its graduates and the Institute. Formed with the notion to bring back our graduates and postgraduates from their professional set-up to revisit their school years, Silicon Alumni Association pledges to renew its journey with its students and keep the family progressing together towards a larger community, the Siliconites Worldwide. Our first Alumni Meet was held in Mumbai

on the 25th of March 2006.

The 13th Alumni Meet 2021 was conducted offline at the Institute on 18th December 2021. A total of about 250 alumni attended the event. Many of the alumni members, who visited the campus after a long time, took interest in the recent developments. They appreciated the development in the infrastructure and achievements which includes the Autonomy and NIRF rank. A small cultural program was organized in the Auditorium followed by a lunch.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

5.4.2 - Alumni's financial contribution during the year

E. <2 Lakhs

File Description	Documents
Upload any additional information	No File Uploaded

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

The Vision and Mission are created by taking into account various factors such as critical elements of the teaching-learning system of the institution, and the future scope of the courses. Suggestions are collected from the stakeholders such as Faculty, Students, Alumni, and Employers. The empowered team of the college involves Principal, FIC and FCoF of different committees, Teaching-staff, IQAC committee, nonteaching and supporting staff, student's union, student representative (C.R.), stakeholders, alumni. The principal monitors the mechanism regarding administration and academic process. It also ensures proper functioning of the policies, rules and action-plans of the college. There are many committees to support the vision and mission of the college. For example, these are Examination cell, career and counselling cell, library and sports committee, cultural committee, internal examination committee, anti-ragging committee, college-magazine committee, Statutory committee, disciplinary committee,

scholarshipcommittee, grievance redressal committee, etc. All the committees take its responsibility for the plans and activities and successfully tackle these responsibilities in every academicsession. For academic performance meetings with HoD's andfaculty of various departments are done. Also, the teachingprogressis checked monthly by the Dean Academics. Theperspective plans are implemented by principal with financecommittee, headed by him/her self. It deals with the financereceived for the various grants and amount received from othersources from overall development and maintenance of college

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/bbsr-home/policies/

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

Governance The system of governance ensures that the authority, responsibilities, and relationships among and between theGoverning Body, Executive Council, Finance Committee, OtherCommittees/Councils, administrators, faculty and employees areclearly described in the rules.The Governing Body is the Principal body of Governance of theInstitution and has the following powers, namely:- 1. To provide general superintendence and policy directions andto control functioning of the Institution by using all such powers as are provided by the statutes, regulations or rules made there-under; 2. To review the decisions of other authorities of theInstitution in case they are not in conformity with theprovisions of the statutes, regulations or rulesmade there under; 3. To approve the budget and annual report of the Institution

4. To lay down the policies to be pursued by the Institution; 5. To appoint the Statutory Auditors of the Institution; 6. To review decisions of the other authorities of the Institution if they are not in conformity with the provisions of the Statutes or the Rules; 7. To make new or additional Statutes or amend or repeal the earlier Statutes and Rules; 8 To approve proposals for submission to the Government and other competant authority.

File Description	Documents
Upload strategic plan and deployment documents on the website	No File Uploaded
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/bbsr-home/policies/

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

Silicon Institute of Technology's strategic plan includes the following: Approved curriculum is strictly adhered to and faculty members and students are encouraged to take up online short term courses to enhance skills and technical abilities. Encouraging high quality research, Industry engagement, Entrepreneurship, Alumni engagement and Social outreach that are targeted at helping people of the region. The activities are planned in the beginning of every academic year through the Academic Calendar and suggestions are sought from faculty members. Development Plan is a quality initiative which concentrates on the development of the departments in terms of infrastructure, faculty strength, faculty achievement, students' development and student achievement. The plan is finalized by the HODs of all departments in consultation with their faculty members. This plan is then discussed in the HODs meeting with the Principal, followed by approval from the management.

The salient features of the strategic plan are: Developing Multidisciplinary innovation ecosystem, leading to incubation at institute, project based learning for students. Increase number of Patent filing Participation in Conferences Organize Workshops/Training for Faculty/ Organizing Conferences Introduce Certificate/Value Added Courses Industrial and Field Visits, Alumni interaction Conducting in-house Hackathons from which selected projects were presented at national level competitions

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/mandatory-disclosure/
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

The entire functioning of the Institute is divided into three areas, viz., teaching, research and nonteaching, for administrative purposes. Accordingly, to facilitate smooth administration of the Institution following authorities help Principal carry out the responsibilities 1. Dean (Academics) 2. Dean (Research) 3. Dean (Administration) 4. Each department shall have a Head who shall be designated from among Its members, on the recommendation of the Director. 5. The Deans and the departmental Heads shall be responsible to the Director for the proper working of their respective Departments. The system of governance makes provision for the consideration of faculty, student, and employee views and judgments in those matters in which these constituencies have a direct and reasonable Interest.

Additionally , the college has the following support Committees/Cells to facilitate smooth functioning of the college: 1. (IQAC) 2. Cell for Statutory Bodies 3. Disciplinary Committee 4. Grievance Committee 5. Committee Against Sexual Harassment 6. Anti ragging committee and Squad 8. Examination Cell 9. Establishment Cell 10. Library Cell 11. Cell for ERP Academics 12. Staff Welfare Cell 13. Residence Cell 14. Student Council 15. Sports & Culture Cell 16. Accounts Cell 17. Purchase Cell 18. Transport Cell 19. Publication Cell 20. Industry Interface Cell

File Description	Documents
Paste link to Organogram on the institution webpage	https://silicon.ac.in/bbsr-home/about-us/
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/bbsr-home/

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination	A. All of the above
File Description	Documents
ERP (Enterprise Resource Planning) Documen	View File
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	No File Uploaded
6.3 - Faculty Empowerment Strategies	
6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression	
<p>The Institute offers/provides lucrative welfare schemes to all the employees to ensure and increase their work efficiency. Provident Fund: ESI facility . Gratuity: Group Saving Linked Insurance: Medical Group Insurance: Reimbursement of Medical Expenses: Paid Leave: Research allowances:</p> <p>Transportation Fee Concession: Subsidized Accommodation Fee Waiver:</p> <p>Own your vehicle scheme: Student Support Funds: Loan Facility: Skill development courses are organized for non- teachingstaff to enhance their skills in work environment. Automation of attendance and leave using biometric system. All the faculty members who upgrade their research workthrough quality publications during the academic year arehonored by management and institute through researchincentive scheme every year. The management also extends financial assistance to the needy students for pursuing higher education in our institution as per the requirement. Motivation through counselling is also available for staffmembers to create a healthy working environment. This not only increases the work life balance of the employee, it also helps us in increasing the productivity and allowsour staff to work effectively with complete satisfaction.</p>	

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

24

File Description	Documents
Upload any additional information	No File Uploaded
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

02

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	View File
Upload any additional information	No File Uploaded

6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

45

File Description	Documents
Summary of the IQAC report	View File
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View File
Upload any additional information	No File Uploaded

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

The Institution has established a mechanism for conducting internal and external audits on the financial transactions every year to ensure financial compliance. Internal audit is conducted half yearly by the internal financial committee of the institution. The committee thoroughly verifies the income and expenditure details and the compliance report of internal audit is submitted to the management of the institution through principal. External audit is conducted once in every year by an external agency. The mechanisms used to monitor effective and efficient use of financial resources are as below: Before the commencement of every financial year, principal submits a proposal on budget allocation, by considering the recommendations made by the heads of all the departments, to the management. College budget includes recurring expenses such as salary, electricity, internet charges, maintenance cost, stationery, other consumable charges etc., and non-recurring expenses like lab equipment purchases, furniture and other development expenses. The expenses will be monitored by the accounts department as per the budget allocated by the management. All vouchers are audited by an internal financial committee on half yearly basis. The accounts of the college are audited by chartered accountant regularly as per the government rules.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

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File Description	Documents
Annual statements of accounts	No File Uploaded
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	No File Uploaded
Any additional information	No File Uploaded

6.4.3 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Silicon Institute of Technology is a self-financed institution, where the funds are generated through the fees paid by the students. Deficit is managed by taking loan from the banks. Additional funding is obtained from by faculty member through Research proposals and consultancy works. These funds are utilized for the research and laboratory development. The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development. Institutional budget is prepared by Accounts department every year taking into consideration of recurring and non-recurring expenditures. Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, etc. are instructed to submit their budget to Account office. All the major financial decisions are taken by the Director and Accounts department with Management of college. As and when urgent requirements arise it is given after sanction received from the designated authority.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The IQAC policy guides us to offer the best academic services by developing a team of highly qualified and motivated professors, providing state-of-the-art laboratories, and excellent library facilities, and a pedagogy focused on innovation and fostering entrepreneurship. IQAC aims to enhance quality parameters and implement interdisciplinary research culture to offer the best academic services. IQAC acts as a nodal agency for all quality related activities of the institute.

It undertakes the following activities to ensure quality.

Managing a feedback system from all stakeholders
Development and application of quality benchmark for various academic and administrative activities of the institute
Assessment of quality enhancement parameters
Conducting regular academic audit
Encouraging research-centric learning

Silicon's IQAC strives to improve the academic services through the following plans.
Automation of academic and administrative processes through ERP
Transformation of knowledge into action for sustaining quality of education
Establishing a mechanism to identify innovations at all levels
Increasing collaboration with industrial organizations and research laboratories

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://silicon.ac.in/bbsr-home/policies/

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

Effective Leadership Practice
Decentralization and Participate Management Perspective/
Strategic Plan Organizational Structure
Administrative Setup and E-governance
Effectiveness of various bodies/
Cells/Committees Financial Support
Professional Development Co-curricular and Extra-curricular Activities
Academic Administrative Audit (AAA)
Participation in various Accreditation and Rankings
Setting quality benchmarks with consistent work
Creating parameters to reach academic as well as nonacademic learning goals
Creating a student-centric teaching-learning environment
Enabling faculty to efficiently use edTech tools for innovation in education
Considering the feedback of students, faculty & parents for the best practices
Organizing various

workshops & seminars for the quality education environment
 Documenting all the activities in chronological order & keeping a tab on improvements Preparing & submitting one of the most important - Annual Quality Assurance Report (AQAR) as per the instructions of the NAAC

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	https://silicon.ac.in/bbsr-home/about-us/

6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	https://silicon.ac.in/wp-content/uploads/2023/07/ANNUAL REPORT 2021-22.pdf
Upload e-copies of accreditations and certification	View File
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Gender Sensitization is the need of the hour to assist the younger generations in building an attitude of acceptance of the differences

and breaking down the gender stereotypes for a better society. SAGE- 'W' (Social Awareness and Gender Equality for Women) cell at Silicon was formed under the guidelines of AICTE in 2020. The Cell's activities will be directed towards Promoting, Practicing and Propagating an ideal state in our society

The cell conducts awareness talks on various topics related to gender stereotypes, division of labour, discrimination etc. Annual events like speech, slogan writing and paintings are conducted to express the emotion in the form of art and communicate their thoughts through experiences. An exclusive contest for the recognition of Women Achiever is conducted every year. The cell is planning to extend awareness on Gender Sensitization in the form of a play (Nukkad Natak) and Women's Day.

Apart from this, the Institute also has an Internal Complaint Committee for Gender Sensitization, Prevention and Prohibition of Sexual Harassment of Women Employees and students and redressal of grievances. A Gender audit is conducted by the ICC which helps to formulate policies and better guidelines for gender equity.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	https://silicon.ac.in/bbsr-home/student-activities/

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

B. Any 3 of the above

File Description	Documents
Geotagged Photographs	View File
Any other relevant information	View File

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

Waste disposal includes the activities and actions required to manage waste from its inception to its final dispos. Waste produced

is solid, liquid, or gas, each type has different methods of disposal and management. Solid waste management: The Canteen waste, paper and plastic are the types of solid waste produced in the campus. This waste is management in the following ways-
 • Reuse of one side printed Paper for internal communication.
 • Two types of Waste bins are provided at campus for biodegradable and nonbiodegradable waste.
 • 1. No of dustbin: - 270
 2. Waste disposal quantity 4500 KG approx. per Month
 Liquid waste management :Institute has a Sewage Treatment Plant to recycle the waste water. This plant treats the waste water and makes it fit for use in washrooms, cleaning purposes and watering plants and trees. The recycled water is used to water plants in the institute garden through a proper mechanism. The treated water is filled in tanks for use in cleaning floors and washrooms.
 Biomedical waste management- There is no bio medical waste produced.
 E waste management- Currently there a vendor for this.
 Hazardous and radioactive waste management- There is no hazardous waste produced in the Institut

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geotagged photographs of the facilities	No File Uploaded
Any other relevant information	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

C. Any 2 of the above

File Description	Documents
Geotagged photographs / videos of the facilities	View File
Any other relevant information	No File Uploaded

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

B. Any 3 of the above

- 1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles**
- 3. Pedestrian-friendly pathways**
- 4. Ban on use of plastic**
- 5. Landscaping**

File Description	Documents
Geotagged photos / videos of the facilities	No File Uploaded
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	No File Uploaded

7.1.6 - Quality audits on environment and energy undertaken by the institution

<p>7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:</p> <ol style="list-style-type: none"> 1. Green audit 2. Energy audit 3. Environment audit 4. Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities 	A. Any 4 or all of the above
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File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-	C. Any 2 of the above
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friendly washrooms Signage including tactile path lights, display boards and signposts
Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc.
Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	No File Uploaded
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

The institution believes in equality of all cultures and traditions as is evident from the fact that students belonging to different caste, religion, regions are studying without any discrimination. Though the institution has diverse socio-cultural background and different linguistic, we do not have any intolerance towards cultural, regional, linguistic, communal socio economic and other diversities. The institution organizes two days Youth and Cultural festival by the YFS UNIT of our college participate in various programmes related to social issues.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

Silicon takes pride in the fact that apart from preparing a sound academic foundation of the student community; the college constantly works upon to develop them as better citizens of the country. In

this regard, the institute, apart from imparting technical education, inculcates a feeling of oneness among the student community through various practices and programs. Various faculties have always been in the practice of organizing activities that not only initiate but also motivate the students to adopt various practices that promote the "Unity in Diversity" of our motherland.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	No File Uploaded

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

B. Any 3 of the above

File Description	Documents
Code of Ethics - policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

International Youth Day (IYD) gives an opportunity to celebrate and mainstream young peoples' voices, actions and initiatives, as well as their meaningful, universal and equitable engagement.

Silicon celebrates the Independence Day every year. Principal hoists

the flag and delivers speech highlighting about the significance of this memorable day to the students and staff. Few Directors, Heads and AO also speak and students along with Principal.

Students of all departments organize Teachers' day and facilitate faculty members and conduct few events.

Department of EEE organizes various programs on National Energy Conservation Day like paper presentation, poster presentation and arranging Guest lectures by eminent personalities in that particular domain.

Silicon encourages yoga activities by keeping Yoga as a non-credit course for all students and Sports Department organizes a small workshop on International Yoga Day and its significance to students and Faculty Members.

Green Club organizes various student activities including plantation drive and Cleanliness Drive activities on the World Environment Day.

SAGE-W Club organizes various activities on the eve of World Women's Day.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	View File
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	No File Uploaded

7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Over a period of 20 years, Silicon has evolved its set of best practices that has contributed to its emergence as a centre of excellence. Some of these practices include:

- Democratic and decentralized governance
- Secular campus with no religious bias
- Orientation program for newly appointed faculty members
- Online feedback from students on the performance of faculty members
- Dedicated Examination Halls with closed circuit cameras
- Quality Circle meetings for improvement of academic, social and environmental issues
- Orientation program for new entrants and

parents meet every year • Training of students for placement examination and interview • Yoga as a compulsory subject for all students • Special classes for academically weak students • Peer teaching in different subjects by final year students • Data Management System on ERP to send lecture notes and study material to students • In-house projects under the guidance of faculty members • Annual Function and Tech Fest for all round development of the students • Students' Council to manage students' affairs, their betterment, and also social causes • Institution of the Best Student of the Year Award • Dedicated in-house counseling cell for mental health wellness

File Description	Documents
Best practices in the Institutional website	https://silicon.ac.in/wp-content/uploads/2023/07/ANNUAL_REPORT_2021-22.pdf
Any other relevant information	Nil

7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Catering to Diverse Needs • The Institute offers Remedial Courses to the students upon joining so that they can adjust to the academic environment of Silicon with ease. This offering is unique to Silicon being a front-ranking Institute with novel academic practices. The senior residents in the hostels also provide the necessary support by conducting peer teaching sessions during the initial semesters. The Institute also plays the role of a facilitator here by providing the necessary infrastructural support for peer learning. • The Institute conducts a comprehensive Orientation Program for newly admitted students in order to help them prepare for the course of study in different branches. • Based on the data provided by students regarding their academic performance at the school and college levels, and also the assessment carried out by our team of teachers and mentors, an identification of the slow and weak learners is done, identifying in the process the advanced learners too.

Accordingly, the slow and weak learners are given learning support in terms of extra classes, remedial classes etc. by the teachers and the mentors as required so that they can improve and learn in a better way. Faculty members also give more attention to such

students as and when required.

File Description	Documents
Appropriate link in the institutional website	https://silicon.ac.in/bbsr-home/student-activities/
Any other relevant information	No File Uploaded

7.3.2 - Plan of action for the next academic year

To get a Private University status from UGC

To open courses in emerging fields like VLSI, IOT & Robotics

To go for more collaboration with good industry for setting up Centre of Excellence

Put more focus on Innovations in various emerging fields.